

USPAT; EPO; JPO; Derwent; IBM TDB files searched Tuesday, August 29, 2000

BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L2	16515	dichroic
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L3	72163	red and blue and green
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L4	128687	polariz\$
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L5	47615	beamsplit\$ or (beam adj2 split\$)
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L6	162460	lcd or (liquid adj crystal adj display)
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L8	10134	L4 adj3 L5
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L9	3600	L2 and L3
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L10	364	L8 and L9
BRS	USPAT; EPO; JPO; Derwent; IBM TDB	L11	194	L6 AND L10

Display of L11

US 5517340 A	DERWENT	High-performance projection display with two light valves - comprises two beam splitter cube, illumination arranged on third side of cube, and	reflective LCD light valves, colour filter wheel to produce sequential
US 5886754 A	DERWENT	Colored liquid crystal display (LCD) projector	
JP 11326834 A	DERWENT	Optical system of reflection liquid crystal projector for TV - includes modulating and reprojecting light rays from polarized light beam splitter	reflection type liquid crystals for
EP 984637 A2	DERWENT	Projection display system for reflective light valves includes light source components, red light component is p-polarized and green and blue light components are s-polarized	generating light beam with RGB light
NN9704201	IBM TDB	Liquid Crystal Display Three Panel Projector Using Three Primary Colors	Light Emitting Diode Light Sources
NN9712165	IBM TDB	High Brightness Color Liquid Crystal Display Projector	
JP 03202846 A	JPO	LIQUID CRYSTAL PROJECTOR	
JP 06342157 A	JPO	LIQUID CRYSTAL PROJECTOR	
JP 08054596 A	JPO	LIQUID CRYSTAL PROJECTOR	
JP 08248377 A	JPO	LIQUID CRYSTAL PROJECTOR	
JP 10142689 A	JPO	LIQUID CRYSTAL PROJECTOR	
JP 10161255 A	JPO	PROJECTION TYPE LIQUID CRYSTAL DISPLAY DEVICE AND LIQUID CRYSTAL PANEL	
JP 10312034 A	JPO	PROJECTION TYPE IMAGE DISPLAY DEVICE	
JP 2000075245 A	JPO	COLOR LIQUID CRYSTAL PROJECTOR	
US 4127322 A	USPAT	High brightness full color image light valve projection system	353/31
US 4864390 A	USPAT	Display system with equal path lengths	348/751
US 4873398 A	USPAT	Flat panel display with integrated digitizing tablet	178/18.07
US 4936656 A	USPAT	Video projector	349/8
US 4969730 A	USPAT	Image projection arrangement	353/31
US 4989076 A	USPAT	Video projection apparatus	348/751
US 4989954 A	USPAT	Projection type liquid crystal display device	349/72
US 5028121 A	USPAT	Projection device	349/9
US 5042921 A	USPAT	Liquid crystal display apparatus	349/9
US 5053765 A	USPAT	Light guide type display apparatus	340/815.43
US 5084807 A	USPAT	Illumination system for LCD projection television	362/228
US 5098183 A	USPAT	Dichroic optical elements for use in a projection type display apparatus	353/31
US 5105289 A	USPAT	Reflection type electrooptical device and a projection type display apparatus using the same	349/180
US 5115305 A	USPAT	Electrically addressable liquid crystal projection system with high efficiency and light output	348/751
US 5157523 A	USPAT	Projection type liquid crystal display unit including orthogonal phase plates	349/8
US 5170194 A	USPAT	Reflection type liquid crystal valve and projector having the same	353/52
US 5172254 A	USPAT	Projection-type liquid crystal display apparatus	349/9
US 5181054 A	USPAT	Device for the projection of images using two orthogonal components of light polarization	353/20
US 5184248 A	USPAT	Image projection apparatus	359/483
US 5200843 A	USPAT	Polarized synthesization in projection type liquid crystal displays	349/9
US 5231521 A	USPAT	Chiral smectic liquid crystal polarization interference filters	349/18
US 5231433 A	USPAT	Reflecting illumination projecting device	353/63
US 5231431 A	USPAT	Projection type display apparatus	353/31
US 5235444 A	USPAT	Image projection arrangement	349/9
US 5237399 A	USPAT	Liquid crystal color projection apparatus for modifying and projecting display images obtained from liquid crystal panels	
348/761			
US 5243455 A	USPAT	Chiral smectic liquid crystal polarization interference filters	349/18
US 5245453 A	USPAT	Liquid crystal modulator having a photoconductor and/or a dielectric mirror composed of hydrogenated amorphous silicon carbide	349/27
US 5267029 A	USPAT	Image projector	348/751
US 5278680 A	USPAT	Projection type liquid crystal display system and method of polarized light component projection	349/9
US 5282121 A	USPAT	High intensity lighting projectors	362/294
US 5283600 A	USPAT	LCD projector	353/34
US 5298986 A	USPAT	Video projection apparatus	348/762
US 5300942 A	USPAT	High efficiency light valve projection system with decreased perception of spaces between pixels and/or hines	345/32
US 5317405 A	USPAT	Display and image capture apparatus which enables eye contact	348/20
US 5347644 A	USPAT	Three-dimensional image display device and systems and methods for implementation thereof	359/465
US 5347433 A	USPAT	Collimated beam of light and systems and methods for implementation thereof	362/554
US 5357370 A	USPAT	Polarizer and light valve image projector having the polarizer	359/495
US 5381197 A	USPAT	Reflecting illumination projecting device	353/98
US 5382790 A	USPAT	Illumination device having beam splitting polarization means	250/216
US 5387953 A	USPAT	Polarization illumination device and projector having the same	353/20
US 5396304 A	USPAT	Slide projector mountable light valve display	353/122
US 5400093 A	USPAT	Image projection system with autofocusing	353/101
US 5410421 A	USPAT	Optical separator of polarizations and application to a display system	359/15
US 5428469 A	USPAT	Liquid crystal display projection systems employing polarizing beam splitters and passing light through display cell from both directions	
US 5434632 A	USPAT	Image projection apparatus with a autofocusing system	353/101
US 5444557 A	USPAT	Single crystal silicon arrayed devices for projection displays	349/42

US 5453859 A	USPAT	Polarization beam splitter and projection display apparatus	349/9	
US 5477351 A	USPAT	Polymer dispersed liquid crystal panel with diffraction grating and reflective counter electrode		349/5
US 5485310 A	USPAT	Linear polarization/conversion apparatus	359/495	
US 5486884 A	USPAT	Reflecting image projection screen and image projection system comprising such a screen		353/122
US 5506705 A	USPAT	Goggle type display apparatus	349/13	
US 5513035 A	USPAT	Infrared polarizer	359/352	
US 5513023 A	USPAT	Polarizing beamsplitter for reflective light valve displays having opposing readout beams onto two opposing surfaces of the polarizer	349/9	
US 5517340 A	USPAT	High performance projection display with two light valves	349/5	
US 5517263 A	USPAT	Image projection system and method of using same	353/31	
US 5530489 A	USPAT	Single projection lens color projection system	348/757	
US 5537303 A	USPAT	Programmable rotatable gobo system	362/284	
US 5537168 A	USPAT	Projection optical apparatus comprising automatic adjustment unit	353/101	
US 5544268 A	USPAT	Display panel with electrically-controlled waveguide-routing	385/4	
US 5570209 A	USPAT	Color projection type display apparatus having three liquid crystal displays of same structure		349/5
US 5579138 A	USPAT	Polarizer having a glass substrate with films on either side with different wavelength characteristics and projection display		
US 5594563 A	USPAT	High resolution subtractive color projection system	349/74	
US 5602679 A	USPAT	High efficiency light valve projection system	359/640	
US 5601351 A	USPAT	High-efficiency illumination device and image projection apparatus comprising such a device		353/20
US 5614961 A	USPAT	Methods and apparatus for image projection	348/750	
US 5617226 A	USPAT	Polymer dispersed liquid crystal projection display having polarizing means		349/10
US 5621547 A	USPAT	Illumination device and application to a display device	359/15	
US 5621521 A	USPAT	Checking apparatus for array electrode substrate	356/237.1	
US 5621486 A	USPAT	Efficient optical system for a high resolution projection display employing reflection light valves		348/756
US 5626408 A	USPAT	Illumination system for a color projection device and circular polarizer suitable for use in such an illumination system, and comprising such an illumination system and circular polarizer	353/20	
US 5647036 A	USPAT	Projection display with electrically-controlled waveguide routing	385/27	
US 5654811 A	USPAT	Color filter system for display panels	349/106	
US 5654775 A	USPAT	Three lamp, three light valve projection system	348/742	
US 5653520 A	USPAT	Liquid crystal display projector	353/34	
US 5657100 A	USPAT	Optical transmittance adjusting device having a matrix of electrodes each connected to a photoconductor smaller than the electrode		
US 5664032 A	USPAT	Display panel with electrically-controlled waveguide-routing	385/4	
US 5666175 A	USPAT	Optical systems for displays	349/95	
US 5682212 A	USPAT	Optical elements having image-forming, color- and polarization-selective reflection and containing cholesteric liquid crystals, and the preparation and use of these elements	349/5	
US 5691886 A	USPAT	Programmable rotatable gobo system	362/283	
US 5691785 A	USPAT	Color projection type display apparatus having three liquid displays of same structure		349/8
US 5694247 A	USPAT	Optical transmissive component with anti-reflection gratings	359/566	
US 5694189 A	USPAT	Reflection type liquid crystal display having inclined pixel electrodes		349/143
US 5692819 A	USPAT	Illuminating device and projector utilizing the same	353/31	
US 5700076 A	USPAT	Laser illuminated image producing system and method of using same		353/31
US 5704700 A	USPAT	Laser illuminated image projection system and method of using same		353/31
US 5706063 A	USPAT	Optical system of a reflection LCD projector	349/9	
US 5715021 A	USPAT	Methods and apparatus for image projection	348/750	
US 5716122 A	USPAT	Optical apparatus using polarizing beam splitter	353/33	
US 5724463 A	USPAT	Projection display with electrically controlled waveguide-routing	385/27	
US 5726719 A	USPAT	Projection-type color display device	349/8	
US 5726723 A	USPAT	Sub-twisted nematic liquid crystal display	349/75	
US 5727860 A	USPAT	Interlaced image projection apparatus	353/20	
US 5729306 A	USPAT	Light splitting and synthesizing device and liquid crystal display apparatus including the same		349/9
US 5738429 A	USPAT	Portable projection display apparatus	353/122	
US 5749642 A	USPAT	Illuminating optical system and projector utilizing the same	353/98	
US 5751384 A	USPAT	Color polarizers for polarizing an additive color spectrum along a first axis and it's compliment along a second axis		
US 5758956 A	USPAT	High intensity lighting projectors	362/294	
US 5777696 A	USPAT	Compact projection apparatus for generating high-quality images	348/752	
US 5777789 A	USPAT	Efficient optical system for a high resolution projection display employing reflection light valves		359/494
US 5784181 A	USPAT	Illumination device for illuminating a display device	359/1	
US 5786934 A	USPAT	Efficient optical system for a high resolution projection display employing reflection light valves		359/494
US 5786873 A	USPAT	Efficient optical system for a high resolution projection display employing reflection light valves		348/756
US 5791754 A	USPAT	Compact desktop projection display using three mirrors	353/78	
US 5805243 A	USPAT	Liquid crystal projector using a spatial light modulator and two rotating color filters		349/5
US 5812223 A	USPAT	Color LCD projector with three color separating polarizing beam splitters	349/9	
US 5815221 A	USPAT	Projector apparatus	348/751	
US 5822021 A	USPAT	Color shutter liquid crystal display system	348/742	
US 5822128 A	USPAT	Projection lenses for display elements and projection systems comprising same		359/650
US 5826960 A	USPAT	Protection type display device with polarized light reflecting mirror and polarized light source		353/20
US 5829868 A	USPAT	High intensity lighting projectors	362/276	
US 5835458 A	USPAT	Solid state optical data reader using an electric field for routing control		369/44.12
US 5833338 A	USPAT	Projector	353/20	
US 5833341 A	USPAT	Illuminating optical system and projector utilizing the same	353/98	
US 5845981 A	USPAT	Multi-color-band scrolling across single-panel light valve	353/31	
US 5852479 A	USPAT	Color liquid crystal projector device	349/9	
US 5864374 A	USPAT	Method and apparatus for image generation	348/757	
US 5868480 A	USPAT	Image projection apparatus for producing an image supplied by parallel transmitted colored light		353/31
US 5875013 A	USPAT	Reflection light absorbing plate and display panel for use in a display apparatus		349/110
US 5879065 A	USPAT	Image projecting apparatus	353/8	

US 5886754 A	USPAT	Liquid crystal display projector	349/8		
US 5889567 A	USPAT	Illumination system for color displays	349/62		
US 5894359 A	USPAT	Color filter and color display apparatus	359/15		
US 5896232 A	USPAT	Highly efficient and compact frontlighting for polarization-based	reflection light valves	359/630	
US 5900982 A	USPAT	High efficiency light valve projection system	359/619		
US 5903388 A	USPAT	High efficiency electromagnetic beam projector and systems and method for implementation thereof		359/497	
US 5909316 A	USPAT	Single plate projection type color liquid crystal display device	359/619		
US 5911018 A	USPAT	Low loss optical switch with inducible refractive index boundary and	spaced output target	385/16	
US 5911489 A	USPAT	Optical lighting system	353/98		
US 5912997 A	USPAT	Frequency converter optical source for switched waveguide	385/15		
US 5914817 A	USPAT	Thin film dichroic color separation filters for color splitters in	liquid crystal display systems	359/634	
US 5917462 A	USPAT	Display apparatus	345/32		
US 5920361 A	USPAT	Methods and apparatus for image projection	348/750		
US 5929946 A	USPAT	Retarder stack for preconditioning light for a modulator having modulation and isotropic states of polarization			
349/18					
US 5933207 A	USPAT	Reflective-type liquid crystal displays using mixed-mode twist nematic	cells	349/99	
US 5932354 A	USPAT	Obliquely deposited film element	428/426		
US 5946054 A	USPAT	Optical apparatus, projection display apparatus and optical compensation	method	348/745	
US 5953083 A	USPAT	Retarder stacks for polarizing a first color spectrum along a first axis and a second color spectrum along a second axis			
349/18					
US 5956110 A	USPAT	Liquid crystal display panel and display device	349/118		
US 5959704 A	USPAT	Display device having diffraction grating	349/9		
US 5969785 A	USPAT	Reflective-type liquid crystal display using polarizer free mixed-mode twist nematic cells with dichroic dye		349/165	
US 5973841 A	USPAT	Single-plate projection-type color liquid crystal display	359/618		
US 5975703 A	USPAT	Image projection system	353/20		
US 5978136 A	USPAT	Optical element, polarization illumination device, and projection	display apparatus	359/487	
US 5982541 A	USPAT	High efficiency projection displays having thin film polarizing	beam-splitters	359/497	
US 5986815 A	USPAT	Systems, methods and apparatus for improving the contrast ratio in reflective imaging systems utilizing color splitters			
359/634					
US 5990996 A	USPAT	Color selective light modulators employing birefringent stacks	349/119		
US 5999240 A	USPAT	Optical retarder stack pair for transforming input light into polarization states having saturated color spectra		349/119	
US 5999282 A	USPAT	Color filter and color image display apparatus employing the filter	359/20		
US 6005644 A	USPAT	Projection display employing circular polarized light for reflection	reduction	349/5	
US 6011640 A	USPAT	High intensity lighting projectors	359/234		
US 6018214 A	USPAT	Illumination system for an image projection device	313/112		
US 6019474 A	USPAT	Modified X-cube arrangement for improved contrast projection display		353/33	
US 6023370 A	USPAT	Light polarizing device for generating a polarized light with different	polarizations	359/487	
US 6033077 A	USPAT	Projection type picture display apparatus	353/119		
US 6034818 A	USPAT	High efficiency electromagnetic beam projector, and systems and methods for implementation thereof		359/497	
US 6040881 A	USPAT	Projection type display apparatus with color optimized anti-reflection	films	349/8	
US 6042237 A	USPAT	Image projection module and image projection device provided with such a	module	353/38	
US 6042234 A	USPAT	Polarized light illumination device and projection display device	353/20		
US 6046858 A	USPAT	Light separation and recombination system for an off-axis projector		359/634	
US 6045228 A	USPAT	Optical modulation device and projector	353/20		
US 6049403 A	USPAT	V-splitter for optical engine	359/107		
US 6049367 A	USPAT	Polarization manipulating device modulator with retarder stack which preconditions light for modulation and isotropic states			
349/117					
US 6052214 A	USPAT	System and method for producing an enhanced image	359/246		
US 6057897 A	USPAT	Active matrix display in which adjacent transistors share a common	source region	349/48	
US 6062695 A	USPAT	Projection type liquid crystal display device	353/38		
US 6067128 A	USPAT	Liquid-crystal display projector including an optical path adjuster arranged in the light path from the light source to the liquid-			
crystal display element			349/8		
US 6066860 A	USPAT	Substrate for electro-optical apparatus, electro-optical apparatus, method for driving electro-optical apparatus, electronic			
device and projection display device			257/71		
US 6078371 A	USPAT	Liquid crystal device and liquid crystal display apparatus	349/95		
US 6078368 A	USPAT	Active matrix substrate, liquid crystal apparatus using the same and display apparatus using such liquid crystal apparatus			
349/48					
US 6076931 A	USPAT	De-centered lens group for use in an off-axis projector	353/100		
US 6078704 A	USPAT	Method for operating a display panel with electrically-controlled	waveguide-routing	385/4	
US 6089718 A	USPAT	Projection display device	353/31		
US 6089719 A	USPAT	Projecting device for displaying electrical images	353/33		
US 6094294 A	USPAT	Optical modulator device, display and electronic apparatus		359/290	
US 6094240 A	USPAT	Liquid crystal display polarizing beam splitter with specific incidence	angle	349/9	
US 6101032 A	USPAT	Light fixture having a multilayer polymeric film	359/500		
US 6100947 A	USPAT	Liquid crystal panel substrate, liquid crystal panel and electronic	apparatus using the same	349/38	
US 6102545 A	USPAT	Liquid crystal display unit	353/38		
US 6109753 A	USPAT	Projection-type display device	353/122		
US 6111618 A	USPAT	LCD projector illumination system having blue and red dichroic mirrors	positioned such that blue mirror receives light		
before red mirror			349/5		